

**PROCEDURE FOR VERIFYING CLEVELAND OPEN-CUP
APPARATUS
AASHTO T 48**

A. PURPOSE

This procedure provides instruction for checking the equipment used to perform the Flash Point Test by the Cleveland Open Cup Tester.

B. APPARATUS REQUIRED

1. Calibrated calipers, readable to 0.05 mm
2. Timer, readable to 0.1 second
3. Thermometer, calibrated and readable to 2 °C (5 °F).

C. PROCEDURE

On the Tester and other equipment, verify that the equipment conforms to the requirements listed on the verification worksheet.

D. TOLERANCE

The equipment shall meet the tolerances specified in AASHTO T 48.

EQUIPMENT VERIFICATION RECORD

Verified By: _____	Date: _____
Equipment: <u>Cleveland Open Cup Apparatus</u>	Location (Lab): _____
Identification No.: _____	Verification Frequency: _____
Previous Verification Date: _____	Next Due Date: _____
Verification Equipment Used: Calibrated caliper, ID#: _____ Thermometer, ID #: _____	
Verification Procedure: <u>(In-house) OMR-CVP-33A / AASHTO T 48</u>	

1. Tester						
Supported on level, steady surface?						
Draft-free location?						
Shielded from strong light?						
2. Heating Plate						
Plate design OK? (Covers, electric heater top)						
Hard asbestos board, suitable design?						
Support holds plate level and steady?						
3. Test Flame Applicator						
Mounted on apparatus?						
Swing radius: not less than 150 mm (6 in.)?						
Orifice not more than 2.5 mm (0.098 in.) above the cup?						
ASTM orifice not more than 2 mm (0.079 in.) above cup?						
Tip 1.6 - 5.0 mm (0.063 – 0.197 in.) dia.?						
ASTM tip approx. 1.6 mm (0.063 in.) dia.?						
Bead: Mounted on apparatus?						
AASHTO 3.8 to 5.4 mm (0.15 – 0.21 in.)						
ASTM 3.2 to 4.8 mm						
4. Heater, Electric						
Centered under plate opening?						
No local superheating?						
No gases or flames up around cup?						
5. Thermometer						
ASTM 11C or 11f: IP 28C or 28F						
Support can hold thermometer as specified?						
Vertical and 6.4 mm (0.25 in.) from cup bottom?						
Center 15.9 mm (.625 in.) from cup edge?						
On-line through center of cup and pivot?						
6. Filling Level Gage (Optional)						
Height of projection(s): 9 to 10 mm (0.354 – 0.394 in.)?						
Flame Orifice Guide Hole:						
Not more than 2.5 mm (0.098 in.) above bottom edge?						